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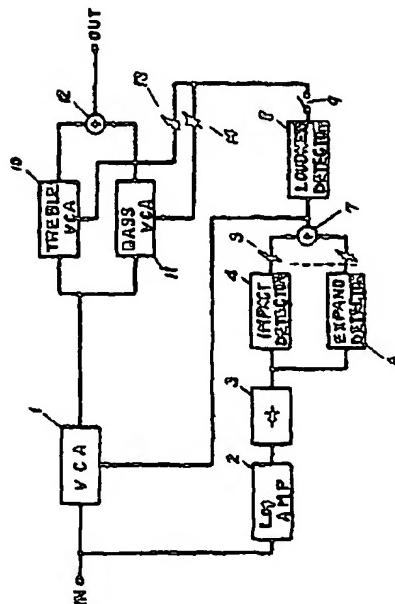
APPLICATION DATE : 08-03-88
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APPLICANT : MATSUSHITA ELECTRIC IND CO LTD;

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TITLE : LOUDNESS DEVICE



ABSTRACT : PURPOSE: To realize a loudness device with simple circuit constitution and inexpensively by compressing and expanding the sound volume of reproducing sound by one system of control circuit system, and performing impact enhancement.

CONSTITUTION: An original voice signal is amplified by a logarithm amplifier 2, and is converted to a DC voltage by a rectifier 3. By the DC voltage, an impact detection circuit 4 and an expand detection circuit 6 output an impact control signal and a compression/expansion control signal, respectively, and when their levels are adjusted by a twin variable resistor 5 and are impressed on a voltage controlled amplifier 1, the sound volume of the reproducing sound is compressed or expanded, and also, the impact enhancement is applied. Also, when a switch 9 is turned ON, a loudness detection circuit 8 outputs a sound volume control signal by the addition signal of the impact control signal and the compression/expansion control signal, and when the sound volumes for a high frequency and a low frequency are adjusted by variable resistors 13 and 14, the sound quality of the reproducing sound can be improved, then, a dynamic range can be expanded.

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